#### RTIP ID# (required) RIV110825

# TCWG Consideration Date June 28, 2016

# Project Description (clearly describe project)

The City of Coachella proposes to replace the existing two-lane Avenue 50 low water crossing over Coachella Valley Stormwater Channel (CVSC) with an improved bridge structure. Built in 1970, the existing low water crossing is functionally deficient and does not meet safety standards because of flooding during storm events; CVSC swells well above the roadway surface during periods of heavy rainfall. The replacement bridge would construct a six-lane configuration (three lanes in each direction) on an alignment south of the existing low water crossing.

#### Location

The Avenue 50 Bridge project site is located within the central area of the City of Coachella, in eastern Riverside County. The existing Avenue 50 low water crossing is situated approximately two miles south of Interstate 10 (I-10) and 0.2-mile west of State Route 86 (SR-86) in the eastern portion of the Coachella Valley (refer to Exhibit 1 [Site Vicinity]).

CVSC generally traverses the site in a northwesterly to southeasterly orientation. The site is bounded by vacant land and SR-86 to the east; the CVSC and agricultural land to the south; single-family residences to the west; and the CVSC and single-family residences to the north. It should be noted that areas north of Avenue 50 and west of Tyler Street are part of the Cabazon Indian Reservation.

# **Existing Conditions**

Avenue 50 traverses the City in an east-west direction from the western city limits and currently terminates west of the Coachella Branch of the All American Canal at Fillmore Street. Avenue 50 within the project limits is currently a 2-lane roadway with a low water crossing through CVSC, and is classified in the City's General Plan Update as a "Major Arterial with Bicycle Facility". The existing Avenue 50 low water crossing is approximately 700 feet long and 32 feet wide, and provides two 12-foot vehicle lanes. There are currently no sidewalks or bicycle lanes on the roadway within the project limits. The existing Avenue 50 crossing is equipped with two 72-inch culverts conveying CVSC flows from north to south; as noted above, the capacity of these culverts is often exceeded, resulting in roadway flooding during heavy storm events.

#### Bridge Improvements

The proposed project includes the replacement of the low water crossing at Avenue 50 and CVSC with a bridge over CVSC. The bridge construction type would be either a cast-in-place box girder bridge or a precast girder bridge. Avenue 50 would be realigned to the south of the existing low water crossing and widened from two to six lanes in the project area, in order to accommodate the future proposed interchange improvements at the intersection of Avenue 50 and SR-86 (refer to Exhibit 2, Subject Site).

The new bridge is anticipated to be approximately 594 feet long and 126 feet wide, and would include six 12-foot-wide vehicle lanes (three in each direction) and 6-foot raised sidewalks on both sides. The bridge would be supported by abutments at each bank of CVSC. There would be a total of four sets of bridge piers within CVSC, with spans ranging from approximately 100 feet up to 130 feet. Permanent ROW acquisition of parcels situated within the southerly realignment of Avenue 50 will be required. All utilities associated with the existing low water crossing would be relocated during construction, and will be concealed and protected within utility openings in the new bridge. The proposed bridge architecture would generally be consistent with that of other bridges in the City and eastern Coachella Valley to maintain the character of the project area. Bridge lighting would be provided for both pedestrian safety and architectural character.

#### CV Link Improvements

Within the project limits, the proposed project would accommodate the planned CV Link Project, a multi-modal transportation facility proposed by the Coachella Valley Association of Governments (CVAG) that would traverse the site along the CVSC. The proposed Avenue 50 bridge would provide a 20-foot-wide pathway, which would travel under the bridge. The pathway would also serve as channel slope protection, immediately upstream and downstream of the Avenue 50 bridge abutments. On- and

off-access ramps from the north and south sides of realigned Avenue 50 would also be provided for CVSC maintenance vehicle access.

# Tyler Street Realignment

In addition to the proposed bridge improvements, a realignment of Tyler Street would be required. Tyler Street is an existing two-lane undivided roadway with a north-south orientation. Within the project area, it is a discontinuous roadway bisected by the CVSC that utilizes Avenue 50 as a means to cross the channel. The proposed project would require realignment of Tyler Street west of the CVSC. The southerly extent of the realignment would occur between Calle Pizano and Calle Mendoza, and the existing alignment would be shifted west within an existing agricultural parcel, ultimately tying into the proposed realigned Avenue 50 to the north. To maintain access to Sierra Vista Park, a driveway would be created along Calle Mendoza, with parking for park users provided along the eastern side of the driveway access. Minor improvements along Tyler Street would also be required east of the proposed bridge, to create a new intersection with realigned Avenue 50.

# Cabazon Access Improvements

Numerous single-family residences on are situated immediately north existing Avenue 50, west of the CVSC. This area is situated on land owned by the Cabazon Band of Mission Indians. Access is currently provided via a roadway extending north from Avenue 50 parallel to CVSC (Magnolia Street). The proposed project would relocate primary access to this residential area by providing a driveway along the north side of Avenue 50 (approximately 1,500 feet west of Magnolia Street). A secondary access to this area would be maintained along Magnolia Street from the proposed intersection of Avenue 50/Tyler Street, west of CVSC.

Type of Proje Change to existing				sheet)							
County Riverside County	Narrative Location/Route & Postmiles The Avenue 50 Bridge project site is located within the central are of the City of Coachella, in eastern Riverside County.										
	Caltrans Projects – EA# BR-NBIL (536) (Federal Project Number)										
Lead Agency:											
Jonathan Hoy	Contact PersonPhone#Fax#EmailJonathan Hoy760-398-5744760-262-6253jhoy@coachella.org										
Hot Spot Poll	Hot Spot Pollutant of Concern (check one or both) PM2.5 X PM10 X										
				· · · · · · · · ·	rmity is Neede	d (ched	ck appropriate	box)			
Categorical Exclusion X EA		or aft EIS	FONSI or Final EIS EIS		PS&E or Construction		Other				
Scheduled Da	te of Fe	deral Action	on: 2017			<u> </u>		•			
NEPA Assign	ment – F	Project Ty	<b>pe</b> (check	appropri	ate box)						
Section 326 –  Exempt  Section 326 –  Categorical Exemption  X  Categorical Exemption											
Current Programming Dates (as appropriate)											
	PE/I	Environme	ental		ENG	ROW		CON			
Start		6/2015	6		/2017	6/2017		10/2018			
End		5/2017 6/2018 6/2018 2/202					2/2020				

# Project Purpose and Need (Summary): (attach additional sheets as necessary)

The purpose of the proposed project is to improve the safety and operation of the Avenue 50 crossing at CVSC. The need for the proposed project relates to the existing operational deficiency of the low water crossing on Avenue 50 at CVSC, which swells above the roadway surface during periods of heavy rainfall. This flooding has forced multiple closures of Avenue 50 in the past and presents a serious hazard to motorists, bicyclists, and pedestrians traversing the roadway during storm events. The new bridge would replace the low water crossing and improve motorist, bicycle, and pedestrian safety within the project area.

### Surrounding Land Use/Traffic Generators (especially effect on diesel traffic)

The proposed project is located within the City of Coachella and is surrounded by open space and residential uses. Diesel truck traffic makes up approximately 5 to 8 percent of the total traffic volumes along Avenue 50 within the project limits. The proposed project would improve the safety and operation of the Avenue 50 Bridge and provide congestion relief to reduce vehicle queuing and idling, thereby reducing emissions, including those from diesel traffic.

# Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

The project would replace the low water crossing at Avenue 50 and CVSC with a bridge. Table 1 (Opening Year [2020] Traffic Volumes) depicts the opening year traffic volumes along each segment within the project limits for both the no build alternative and the build alternatives. As shown in Table 1, the highest opening year no build average daily traffic (ADT) volumes would be 19,100, which include truck volumes of 1,051 ADT. The highest opening year build (with project) ADT volumes would be 19,100, which include truck volumes of 1,084 ADT. Avenue 50 between Tyler Street and SR-86 would have the highest number of trucks with 1,106 ADT in both the build and no build conditions. As indicated in Table 1, both Build Alternatives would have daily traffic volumes less than 125,000 ADT. Additionally, daily truck volumes would be less than 10,000 ADT.

Table 1
Opening Year [2020] Traffic Volumes

		2020 No Bui	ild		# Trucks				
Location	ADT	% Trucks	# Trucks	ADT	% Trucks	# Trucks	Percent Change		
Avenue 50									
West of Harrison Street	11,200	5.40%	605	11,300	5.40%	610	1%		
Leoco Lane to Peter Rabbit Lane	19,100	5.50%	1,051	19,700	5.50%	1,084	3%		
Tyler Street to SR-86	14,000	7.90%	1,106	14,000	7.90%	1,106	0%		
Source: Fehr and Peers, Traffic report for Avenue 50 Bridge Over Coachella valley Stormwater Channel (CVSC), May 2016.									

Table 2 (Opening Year Level of Service) summarize the existing delay and corresponding Level of Service (LOS) within the project area. As shown in Table 2, LOS would generally improve (i.e., delay would be reduced). However, the additional capacity proposed by the Avenue 50 Bridge project would attract more traffic using the Avenue 50/SR-86 intersection and result in higher delay at the ramp terminals. This at-grade intersection is proposed to upgrade to an interchange by Year 2022 as a separate project. All other study intersections would operate at acceptable LOS D or better conditions under the 2020 Plus Project conditions.

# Table 2 Opening Year Level of Service

			No Pro	ject	Plus Project		
Intersection	Control	Peak Hour	Delay <sup>1,2</sup> (sec/veh)	LOS	Delay <sup>1,2</sup> (sec/veh)	LOS	
Avenue 50/Harrison Street	Signal	AM	32	С	33	С	
1. Avenue 30/Hamson Street		PM	44	D	46	D	
2 Avenue FO/I accel and	Cianal	AM	8	Α	8	Α	
2. Avenue 50/Leoco Lane	Signal	PM	9	Α	9	Α	
2 Avenue 50/Deter Debbit Lene	Signal	AM	8	Α	8	Α	
3. Avenue 50/Peter Rabbit Lane		PM	9	Α	9	Α	
A Avenue FO/Tules Chreek/Meanelie	Stop-	AM	>50	F	18	В	
4. Avenue 50/Tyler Street/Magnolia	Control <sup>4</sup>	PM	>50	F	15	В	
5. Avenue 50/Southbound SR-863	Signal	AM	57	Е	64	E	
5. Avenue 50/Southbound 5R-00°		PM	53	D	73	E	
C Average FO/Newthhoused CD 963	Signal	AM	57	Е	49	D	
6. Avenue 50/Northbound SR-86 <sup>3</sup>		PM	53	D	73	E	
7. Avenue FO/Tules Charet	Cianal	AM	10	В	11	В	
7. Avenue 50/Tyler Street	Signal	PM	11	В	12	В	

#### Notes:

- Delay was reported as averaged delay for entire intersection for signalized intersections and worse-case movement delay and LOS
  was reported for unsignalized intersections. Delay was calculated based on methodologies contained in the Highway Capacity
  Manual (HCM) 2010.
- 2. Bold indicates unacceptable LOS.
- 3. Intersections #5 and #6 operate as one intersection under the same controller with the same delay and LOS reported.
- 4. Intersection #4 will be signalized under the Plus Project conditions.

Source: Fehr and Peers, Traffic report for Avenue 50 Bridge Over Coachella valley Stormwater Channel (CVSC), May 2016.

# RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

Table 3 (Horizon Year 2040 Traffic Volumes) provides the 2040 volumes for the no build alternative and the build alternatives. Table 3 compares the no build and build traffic volumes along each roadway segment. As shown in Table 3, traffic volumes within the project limits would not exceed 125,000 vehicles daily. The proposed improvements involve a bridge replacement and would not directly generate new heavy truck trips in the project area.

Table 3
Horizon Year 2040 Traffic Volumes

		2040 No Bui	ld		# Trucks				
Location	ADT	% Trucks	# Trucks	ADT	% Trucks	# Trucks	Percent Change		
Avenue 50									
West of Harrison Street	15,300	5.40%	826	15,600	5.40%	842	2%		
Leoco Lane to Peter Rabbit Lane	30,500	5.50%	1,678	33,400	5.50%	1,837	10%		
Tyler Street to SR-86	28,000	7.90%	2,212	35,000	7.90%	2,765	25%		

Table 4 (Future Year Level of Service) summarizes the existing delay and corresponding LOS within the project area. As shown in Table 4, LOS would generally improve (i.e., delay would be reduced) under build conditions.

Table 4							
Future Year Level of Service							

			No Pro	ject	Plus Project		
Intersection	Control	Peak Hour	Delay <sup>1,2</sup> (sec/veh)	LOS	Delay <sup>1,2</sup> (sec/veh)	LOS	
1. Avenue 50/Harrison Street	Cianal	AM	31	С	39	D	
1. Avenue 50/Hamson Street	Signal	PM	44	D	55	D	
2. Avenue 50/Leoco Lane	Cianal	AM	11	В	12	В	
2. Avenue 50/Leoco Lane	Signal	PM	25	С	28	С	
2 Avenue FO/Deten Debbit Long	0: 1	AM	9	Α	9	Α	
3. Avenue 50/Peter Rabbit Lane	Signal	PM	9	Α	10	Α	
4 Avenue FO/Tules Otrest/Mesocies	Stop-	AM	>50	F	39	D	
4. Avenue 50/Tyler Street/Magnolia <sup>3</sup>	Control	PM	>50	F	26	С	
5. Avenue 50/Southbound SR-863	Cianal	AM	8	Α	15	В	
5. Avenue 50/Southbound 5R-863	Signal	PM	9	Α	3	Α	
C. Average FO/Northbound CD 903	Signal	AM	6	Α	11	В	
6. Avenue 50/Northbound SR-86 <sup>3</sup>		PM	21	С	10	В	
7. A	0:	AM	This existing intersection will be relocated as part of				
7. Avenue 50/Tyler Street	Signal	PM	the Avenue 50/SR-86 interchange project				
Q. Avenue FO/Dealianed Tyles Street/	Stop-	AM	19	С	16	С	
8. Avenue 50/Realigned Tyler Street <sup>4</sup>	Control	PM	27	D	24	С	

#### Notes:

- Delay was reported as averaged delay for entire intersection for signalized intersections and worse-case movement delay and LOS
  was reported for unsignalized intersections. Delay was calculated based on methodologies contained in the Highway Capacity Manual
  (HCM) 2010.
- 2. Bold indicates unacceptable LOS.
- 3. Intersection #4 will be signalized under Plus Project conditions.
- 4. Intersection #8 is the future realigned Tyler Street/Avenue 50 intersection.

Source: Fehr and Peers, Traffic report for Avenue 50 Bridge Over Coachella valley Stormwater Channel (CVSC), May 2016.

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Above.

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

See Above.

Describe potential traffic redistribution effects of congestion relief (impact on other facilities)

The project is a street/bridge improvement project that includes bridge replacement of a low water crossing, roadway widening, and safety improvements. Although the additional capacity proposed by the Avenue 50 Bridge project would attract more traffic to the Avenue 50/SR-86 intersection, the proposed project would not divert to other routes, and the travel demand volume is not predicted to vary significantly between the build and no-build conditions. Thus, local traffic would not be significantly redistributed. Additionally, as shown in Table 2 and Table 4, LOS would generally improve (i.e., delay would be reduced) under build conditions.

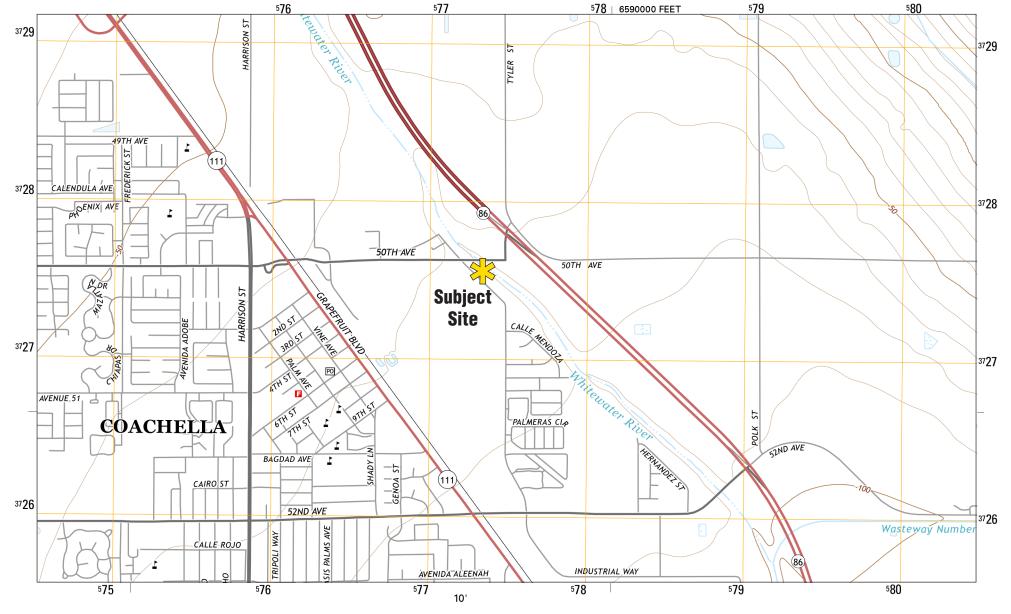
#### **Comments/Explanation/Details** (attach additional sheets as necessary)

The proposed project would not conflict with an applicable plan, policy, or regulation of an agency with jurisdiction over the project. The proposed project is also consistent with Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and Federal Transportation Improvement Program (FTIP) (RTP ID RIV110825 and FTIP ID RIV110825) and is intended to meet the traffic needs in the area based on local land use plans.

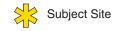
The EPA's March 2006 guidance document *Transportation Guidance for Qualitative Hot-spot Analysis in PM*<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas references a two-step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 ADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes. As discussed above, traffic volumes within the project limits would not exceed 125,000 vehicles daily. The truck percentage is also projected to remain the same for both the opening year and the horizon year

Per the criteria under 40 CFR 93.123(b)(1), the proposed project does not qualify as project of local air quality concern (POAQC). The proposed project is not a new or expanded highway project that would have a significant number or increase in the number of diesel vehicles. The project also would not increase the percentage of heavy trucks in the study area. Therefore, implementation of the proposed project would not cause a significant increase of diesel vehicles (trucks).

Based on the information provided above, the proposed project would not involve a significant amount of diesel truck traffic, as traffic volumes would be less than 125,000 ADT, and is in compliance with the RTP/FTIP. Therefore, the project meets the Clean Air Act requirements and is not a project of air quality concern under 40 CFR 93.123(b)(1).



Source: USGS Indio, CA Quadrangle, 2016.







AVENUE 50 BRIDGE OVER COACHELLA VALLEY STORMWATER CHANNEL



SOURCE: Google Earth Pro Aerial, April 2016.

Subject Site

AVENUE 50 BRIDGE OVER COACHELLA VALLEY STORMWATER CHANNEL

**Subject Site**